# Radiocarbon Date from the Globe Hill Shell Heap 46HK34-1, Hancock County, West Virginia

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ABSTRACT

A radiocarbon date of 2170 B.C. from deer bone refuse obtained at the Globe Hill shell heap closely approximates the only previously available "Panhandle Archaic" radiocarbon date. Although the Globe Hill shell heap is a multi-component site ranging from Plano to Late Prehistoric, this radiocarbon date tends to support Dragoo's placement of the major occupations at "Panhandle Archaic" sites in the Late Archaic.

## Introduction

DON W. Dragoo (1959) summarized the history of the "Panhandle Archaic" concept. He has further suggested that the Steubenville Stemmed and Lanceolote blade tradition is not an early Archaic manifestation, as originally posited by William Mayer-Oakes (1955a,b) and has accumulated considerable evidence to this effect.

Unfortunately, except for Dragoo's excavations at the Dixon and Rohr rockshelters, Monongalia County, West Virginia, no stratigraphic data are available for the Late Archaic of the upper Ohio Valley. Only the Globe Hill shell heap, of the handful of known Panhandle Archaic sites, has undergone controlled excavation; it and other shell heap sites have since been thoroughly destroyed by indiscriminate digging. Essentially all that is available from most of these is artifact collections.

Only one previous radiocarbon date exists for a Panhandle Archaic site. H. R. Crane and James B. Griffin (1958:1119) report a date of 2270 B.C. ± 500 (M229) on fresh-water naiad shell from the East Steubenville site, Brooke County, West Virginia. This date has been reported subsequently as 2262 B.C. (George 1971:9) and 2279 B.C. (Kinsey 1972:445). This date has necessarily remained somewhat suspect, for fresh-water shell has often given erratic results because of isotopic fractionation during the life of the animal. Therefore, as a check on the East Steubenville date, an attempt was made to radiocarbon date bone refuse from the nearby Globe Hill site.

## The Globe Hill Date

A sample of deer bone refuse collected by Vivien Marshall, Bradenton, Florida, from throughout the Globe Hill midden, was submitted to Dicar Radioisotopes Laboratory, Case Western Reserve University, Cleveland, Ohio. Some objection (J. B. Griffin 1975: pers comm.) was raised regarding the value of dating such a sample, for, scattered through the midden as it was, the sample might be of a heterogeneous origin. The same objection, of course, could be made regarding the original East Steubenville shell sample. The risk of obtaining an essentially meaningless date seemed to be outweighed by the desirability of corroborating the East Steubenville date, particularly since such possibilities are becoming more and more remote with the continued destruction of the few remaining Panhandle Archaic sites.

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The Globe Hill sample yielded a date of 2170 B.C. ± 220 (CWR 184). This corresponds remarkably well with the East Steubenville date of 2270 B.C. (If MASCA tree ring corrections are made, the date is 2830 B.C. for East Steubenville and 2610 B.C. for Globe Hill).

## Discussion

The question remains as to which of the several components at Globe Hill is represented by this date. Both Mayer-Oakes and Dragoo tacitly recognized the multi-component nature of this site in their discussion of a "Half Moon Cordmarked" pottery sherd found during the 1953 Carnegie Museum excavations, but examinations of subsequent collections made by Vivien Marshall, Thelma Murphy, Ralph Weaver, and others, indicates that this fact has not received sufficient stress.

Several Late Woodland triangular flint points (Fig. 1p) have been found at the site along with sherds of Monongahela Cordmarked pottery. At the nearby Tomlinson Run (Childers) shell heap, part of a small Middle Woodland vessel has been recovered by the landowner. The Globe Hill site has also yielded a distinct Adena component, including Cresap (Fig. 2f) and Adena Stemmed (Fig. 2e) blades as well as other stemmed points (Fig. 2g,h) that are probably Early Woodland, and a banded slate gorget fragment (Fig. 2b). Dragoo (1961:45) has used the presence of Early Adena pottery at Globe Hill, along with typological similarities between Early Woodland stemmed blades and Steubenville Stemmed blades, to support his contention that the Steubenville lithic tradition is Late Archaic in age.

Dragoo (1961) also emphasized the importance of John Witthoft's "Transitional Period" in the Late Archaic of the upper Ohio Valley. A Lehigh-Koens/Crispin-like point (Fig. 2d) from the Globe Hill shell heap indicates the presence of a minor Transitional Archaic component at the site. A broken expanded stem base (Fig. 1a) closely approximates W. Fred Kinsey's (1972) MacPherson point type from his Delaware Valley Archaic complex (estimated age, 2500-1700 B.C.). Kinsey (1972:341) has also noted intergradations between Lamoka-like, Normanskill-like, MacPherson, and Lackawaxen Stemmed points at the Farrel Farm site in New York, radiocarbon-dated at 2030 B.C. ± 160 and 1940 B.C. ± 120. Herbert Kraft (1957:37) describes such flint points from the Tocks Island area of the upper Delaware Valley, apparently from the same zone (his Lackawaxen-Poplar Island component, Zone 3) that yielded several broad stemmed, Steubenville-like blades which he compares to the Genesee point type.

While well aware of, and in complete agreement with, Kinsey's (1971:3) stricture against identifying archaeological complexes on the basis of far-flung typological look-alikes, it seems probable to me that these various points from Globe Hill do represent an eastern element ascribable or ancestral to Witthoft's "Transitional" broad spear tradition and, less certainly, one related to Kinsey's Delaware Valley Archaic complex.

The major Archaic occupation at Globe Hill and other Panhandle Archaic sites, however, has usually been approached in terms of its relationship to the Brewerton and Lamoka phases of the Laurentian Archaic. Many of the non-descript small side- and corner-notched points from Globe Hill, East Steubenville, the Dixon and Rohr rockshelters, and the Gay Shriver site cannot be distinguished from Brewerton Side- and Corner-Notched points. Likewise, although Dragoo (1959:221) states that there is "no indication of the Lamoka complex at either the Dixon or Rohr sites," a few of his illustrated points could be included in the rather broadly defined Lamoka point type (Ritchie 1961:29) as could a number of points from Globe Hill (Fig. 1k, 1o, 2l). Mayer-Oakes (1955a) and Dragoo (1959) have detailed the more striking Lamoka-like elements in the Panhandle Archaic, such as the presence of the beveled adze, and Dragoo has concluded that the Panhandle Archaic and Lamoka "are distinctive regional complexes which developed upon a Laurentian base, subjected to differing influences from surrounding areas."

More recently (cf. Kinsey 1972:419), Dragoo and Bettye Broyles have recognized a

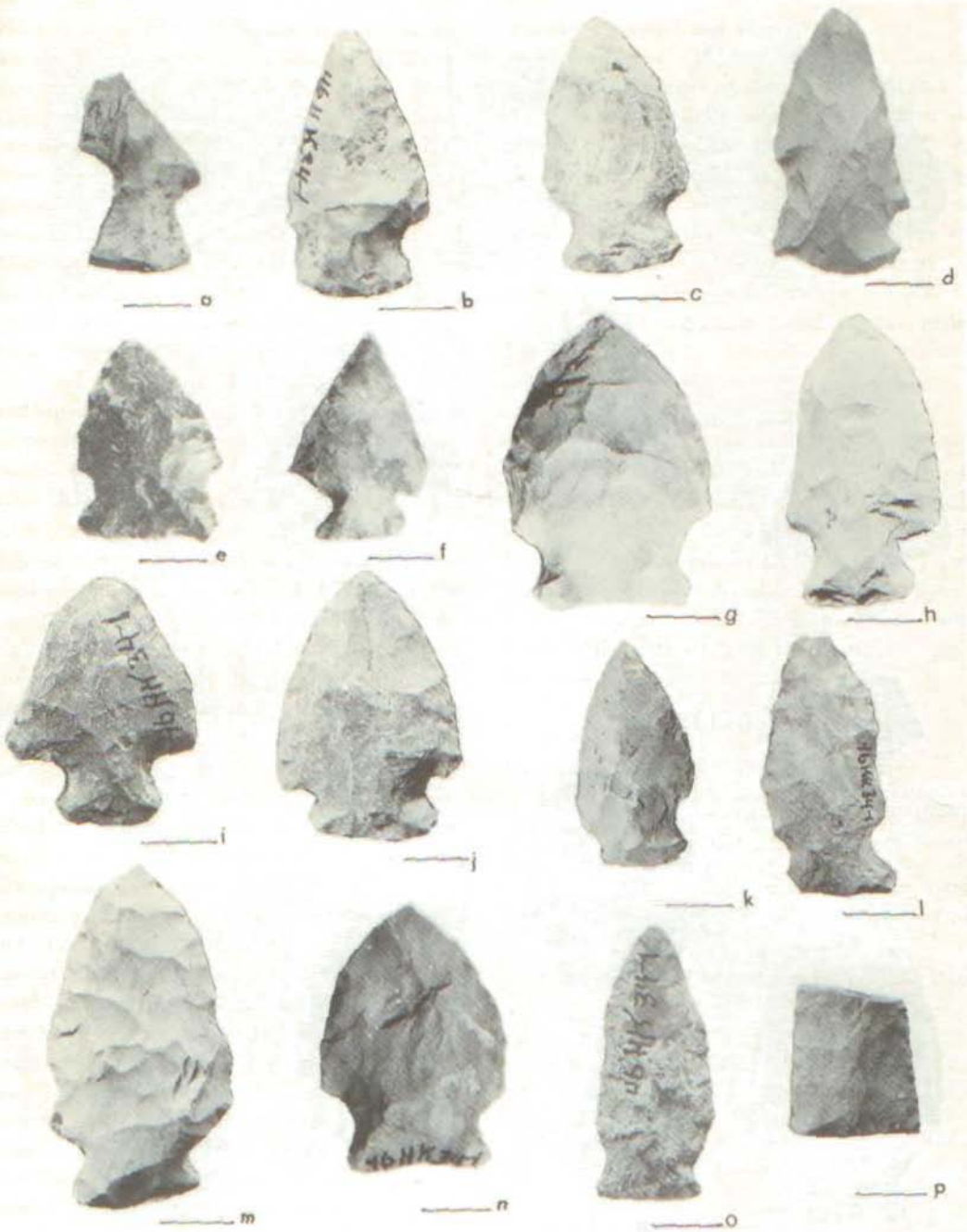


Fig. 1. a, MacPherson-like *point, unidentified* flint; b-e, Shriver Expanding Stem points, pebble chert, Monongahela flint (c), and *Upper Mercer flint* (e); f, Corner-notched point, Flint Ridge flint; g, n, Shallow side-notched point, pebble chert; h, *Shriver Expanding* Stem point, pebble chert; i, j, Corner-notched points, Upper Mercer flint and pebble chert; *k*, o, *Lamoka-like points*, pebble chert; l, m, Side notched points, pebble chert; p, Late Prehistoric triangular point, pebble chert. *Linear scale* represents 1 cm.

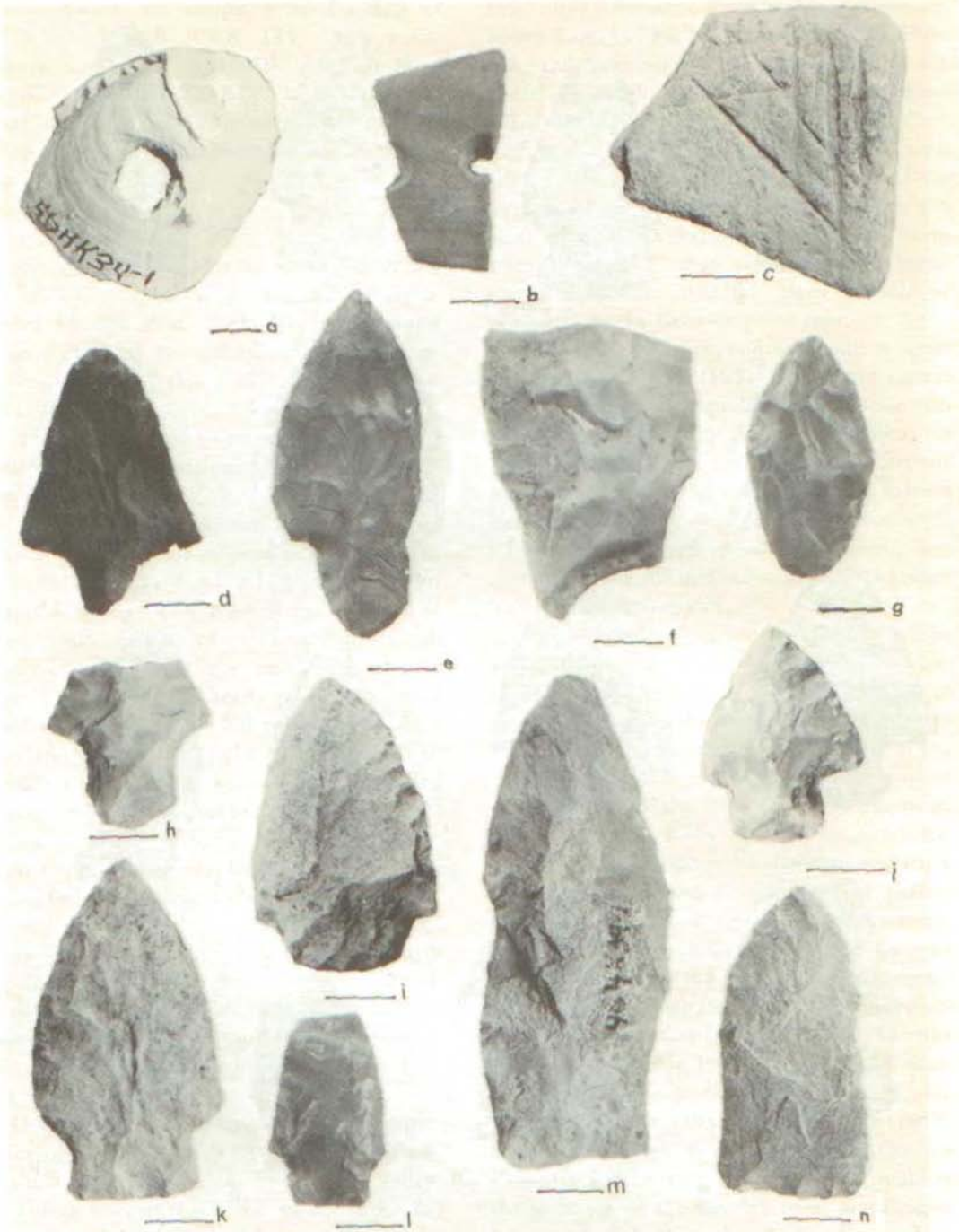


Fig. 2. a, Drilled naiad shell; b, Banded slate gorget fragment; c, Siltstone abrading stone; d, Lehigh-Koens/Crispin-like point, Upper Mercer flint; e, Adena Stemmed blade, Upper Mercer flint; f, Cresap stemmed blade, Flint Ridge flint; g, h, Stemmed points, unidentified gray flint and Flint Ridge flint; i-k, Shriver Expanding Stem points, pebble chert; l, Lamoka-like point, pebble chert; m, n, Crude Steubenville Lanceolate blades, pebble chert. Linear scale represents 1 cm.

small, Shriver Expanded Stem point type which seems to be ubiquitous throughout the late Archaic of the upper Ohio Valley. Typologically these points grade into lower Ohio Valley forms such as Merom Expanding Stem (Winters 1969:151), dated at 2000-1000 B.C. Many are indistinguishable from Ritchie's illustrated small sized Lamoka points and from Lamoka-like points illustrated from Athens (Murphy 1975:104) and Muskingum counties (Morton and Carskadden 1975:19), Ohio. Morton and Carskadden have denominated these "Gilbert points" and noted that most of them are made from Flint Ridge flint, contrasting sharply in this respect with their Brewerton-like points, which are made predominantly of Upper Mercer flint. It would seem that there was a widespread Lamokoid lithic tradition throughout the Ohio-Michigan-Indiana region, but it is doubtful that these materials should be referred to either the Lamoka complex or to the Panhandle Archaic. James E. Fitting (1970:71), in particular, has emphasized the wide ranging occurrence of such stemmed and expanding stemmed points which are often found in otherwise non-Lamokoid assemblages.

At present there is no way of knowing whether the Steubenville and Shriver point types represent contemporaneous or temporally overlapping traditions. Dragoo regards the Shriver point type as long ranging in time; it and the Steubenville blades were probably in use at the same time. Certainly the stratigraphic evidence presented by Kinsey (1972) and Kraft (1975) for the Delaware Valley area suggests that such diverse point types are at least partly contemporaneous. It seems likely, therefore, that the Globe Hill and East Steubenville radiocarbon dates represent the age of the Steubenville blade tradition. This is regarded as the upper Ohio Valley Late Archaic manifestation analagous to the broad blade tradition represented in the east and southeast by Genesee and Savannah river point types. Comparison with Louis A. Brennan's (1969, 1970) "proto-Adena" Friendship tradition of the middle Ohio Valley would certainly be in order but is hampered by the fact that this stemmed blade tradition has yet to be adequately described and illustrated.

Mayer-Oakes (1955b) suggested that the greater percentage of Steubenville blades at the East Steubenville site indicated that the shell heap was older than Globe Hill. Although the 2 available radiocarbon dates suggest that this chronological ordering is correct —particularly if the MASCA corrections are considered—the multi-component nature of such sites renders relative age estimations based on seriation techniques rather hazardous.

## Conclusions

The Globe Hill radiocarbon date of 2170 B.C. accords well with the previously run shell date of 2270 B.C. from East Steubenville and strengthens Dragoo's (1959) contention that the Panhandle Archaic represents a Late Archaic phase contemporaneous with Lamoka but distinct from that culture.

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